

Amendments to the Claims

1.-42. (Canceled).

43. (New) A method for removing injector fouling in a diesel engine, the method comprising:

providing a fouled diesel engine comprising an initial level of injector fouling, as evidenced in the laboratory by an initial fouling index; and,

removing at least some of the initial level of injector fouling, producing a cleaned diesel engine having a reduced level of injector fouling, as evidenced during laboratory testing by a reduced fouling index;

the removing comprising combusting in the diesel engine a fuel blend comprising a sufficient amount of Fischer-Tropsch derived gas oil to produce the cleaned diesel engine.

44. (New) The method of claim 43 wherein the reduced fouling index is 6% or more lower than the initial fouling index.

45. (New) The method of claim 43 wherein the fuel blend comprises a standard diesel fuel composition comprising less than 1% w/w Fischer-Tropsch derived gas oil, the method further comprising increasing the removal of the initial level of injector fouling by increasing the amount of the Fischer-Tropsch derived gas oil in the fuel blend, the increase in removal being evidenced in the laboratory by a further reduced fouling index.

46. (New) The method of claim 43 wherein the fuel blend comprises a standard diesel fuel composition comprising less than 1% w/w Fischer-Tropsch derived gas oil, the method further comprising increasing the removal of the initial level of injector fouling by providing the fuel blend with a sufficient quantity of detergent to produce a further reduced fouling index during laboratory testing.

47. (New) The method of claim 45 further comprising increasing the removal of the initial level of injector fouling by providing the fuel blend with a sufficient quantity of detergent to produce an even further reduced fouling index during laboratory testing.

48. (New) The method of claim 43 wherein the Fischer Tropsch derived gas oil comprises 95% w/w or greater components having boiling points of from about 150 to about 400°C.

49. (New) The method of claim 43 wherein the Fischer-Tropsch derived gas oil has a 90% w/w distillation temperature of from 300 to 370 °C.

50. (New) A method for removing injector fouling in a diesel engine, the method comprising:
providing a fouled diesel engine comprising an initial level of injector fouling, as evidenced in the laboratory by an initial fouling index; and,
removing at least some of the initial level of injector fouling, thereby producing a cleaned diesel engine having a reduced level of injector fouling, as evidenced in the laboratory by a reduced fouling index;
the removing comprising combusting in the diesel engine a fuel blend effective to produce the cleaned diesel engine, the fuel blend comprising a standard diesel fuel composition comprising less than 1 %w/w Fischer-Tropsch derived gas oil and an amount of 0.5 % w/w or more Fischer-Tropsch derived gas oil.

51. (New) The method of claim 50 comprising increasing the removal of the initial level of injector fouling by increasing the amount of the Fischer-Tropsch derived gas oil in the fuel blend, the increase in removal being evidenced in the laboratory by a more reduced fouling index.

52. (New) The method of claim 50 comprising increasing the removal of the initial level of injector fouling by providing the fuel blend with a sufficient quantity of detergent to produce a further reduced fouling index during laboratory testing.

53. (New) The method of claim 51 comprising increasing the removal of the initial level of injector fouling by providing the fuel blend with a sufficient quantity of detergent to produce an even further reduced fouling index during laboratory testing.

54. (New) The method of claim 51 comprising increasing the amount of the Fischer-Tropsch derived gas oil to about 10% w/w or more of the fuel blend.

55. (New) The method of claim 51 comprising increasing the amount of the Fischer-Tropsch derived gas oil to about 30% w/w or more of the fuel blend.

56. (New) The method of claim 50 wherein 95% w/w or more of components of the 0.5 % w/w or more Fischer-Tropsch derived gas oil have boiling points of from about 150 to about 400°C

57. (New) The method of claim 50 wherein 95% w/w or more of components of the 0.5 % w/w or more Fischer-Tropsch derived gas oil have boiling points of from about 170 to about 370°C.

58. (New) The method of claim 50 wherein the 0.5 % w/w or more Fischer-Tropsch derived gas oil has a 90% w/w distillation temperature of from 300 to 370 °C.

59. (New) A method for reducing injector fouling in a diesel engine, the method comprising:

providing a diesel engine exhibiting an initial level of injector fouling, as evidenced in the laboratory by an initial fouling index; and,

operating the diesel engine using a fuel blend comprising a sufficient amount of Fischer-Tropsch derived gas oil to maintain or reduce the initial level of injector fouling.

60. (New) The method of claim 59 comprising reducing the initial level of injector fouling by increasing the amount of the Fischer-Tropsch derived gas oil in the fuel blend, the reduction being evidenced in the laboratory by a reduced fouling index.

61. (New) The method of claim 59 comprising reducing the initial level of injector fouling by providing the fuel blend with sufficient quantity of detergent to produce a more reduced fouling index during laboratory testing.

62. (New) The method of claim 60 comprising further reducing the initial level of injector fouling by providing the fuel blend with a sufficient quantity of detergent to produce a further reduced fouling index during laboratory testing.

63. (New) The method of claim 60 comprising increasing the amount of the Fischer-Tropsch derived gas oil to about 10% w/w or more of the fuel blend.

64. (New) The method of claim 60 comprising increasing the amount of the Fischer-Tropsch derived gas oil to about 30% w/w or more of the fuel blend.

65. (New) The method of claim 59 wherein the Fischer-Tropsch derived gas oil reduces the initial level of injector fouling and produces a fouling index that is 6% or more lower than the initial fouling index.

66. (New) The method of claim 59 wherein the Fischer-Tropsch derived gas oil reduces the initial level of injector fouling and produces a fouling index that is 9% or more lower than the initial fouling index.

67. (New) The method of claim 60 wherein the Fischer-Tropsch derived gas oil reduces the initial level of injector fouling and produces a fouling index that is 9% or more lower than the initial fouling index.

68. (New) The method of claim 59 wherein 95% w/w or greater of components of the Fischer-Tropsch derived gas oil have boiling points of from about 170 to about 370°C.

69. (New) The method of claim 59 wherein the Fischer-Tropsch derived gas oil has a 90% w/w distillation temperature of from 300 to 370 °C.

70. (New) A method for reducing combustion related deposits in a diesel engine, the method comprising:

introducing into a combustion chamber of the diesel engine a fuel blend comprising (a) a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil, and (b) an amount of about 5 w/w% or more of Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C;

the diesel engine running on the standard diesel fuel composition producing a first quantity of engine fouling, as evidenced in the laboratory by an initial fouling index, and the diesel engine running on the fuel blend producing a reduced quantity of engine fouling, as evidenced in the laboratory by a reduced fouling index.

71. (New) The method of claim 70 wherein the reduced fouling index is 6% or more lower than the initial fouling index.

72. (New) The method of claim 70 wherein the reduced fouling index is 9% or more lower than the initial fouling index.

73. (New) The method of claim 70 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

74. (New) The method of claim 71 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

75. (New) The method of claim 72 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

76. (New) The method of claim 70 comprising further reducing the quantity of engine fouling by increasing the amount of the Fischer-Tropsch derived gas oil to about 10 % w/w or more of the fuel blend.

77. (New) The method of claim 73 comprising further reducing the quantity of engine fouling by increasing the amount of the Fischer-Tropsch derived gas oil to about 30 % w/w or more of the fuel blend.

78. (New) A method for removing combustion related deposits in a diesel engine, the method comprising:

operating a diesel engine using a standard diesel fuel composition comprising less than 1 w/w% Fischer-Tropsch derived gas oil, producing engine fouling comprising a quantity of combustion related deposits, as evidenced in the laboratory by an initial fouling index;

thereafter operating the diesel engine using a fuel blend comprising an amount of the Fischer-Tropsch derived gas oil sufficient to reduce the quantity of combustion related deposits, as evidenced in the laboratory by a reduced fouling index, the Fischer-Tropsch derived gas oil comprising 95% w/w or greater components having boiling points of from about 150 to about 400°C.

79. (New) The method of claim 78 wherein the reduced fouling index is 6% or more lower than the initial fouling index.

80. (New) The method of claim 78 wherein the reduced fouling index is 9% or more lower than the initial fouling index.

81. (New) The method of claim 78 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

82. (New) The method of claim 79 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

83. (New) The method of claim 80 comprising providing the fuel blend with a sufficient quantity of detergent to produce a more reduced quantity of engine fouling during laboratory testing.

84. (New) The method of claim 78 comprising further reducing the quantity of engine fouling by increasing the amount of the Fischer-Tropsch derived gas oil to about 10% w/w of the fuel blend.

85. (New) The method of claim 81 comprising further reducing the quantity of engine fouling by increasing the amount of the Fischer-Tropsch derived gas oil to about 30% w/w or more of the fuel blend.